

PRODUCT INFORMATION PACKET

marathon®
Motors

Model No: 326THFCD19033

Catalog No: W581A

XRI®-841 Severe Duty Motor, 50 HP, 3 Ph, 60 Hz, 575 V, 1800 RPM, 326T Frame, TEFC



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RegalRexnord

Nameplate Specifications

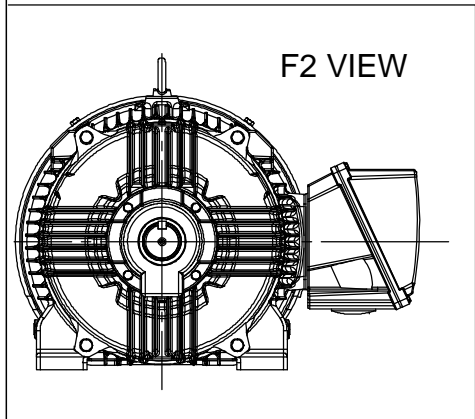
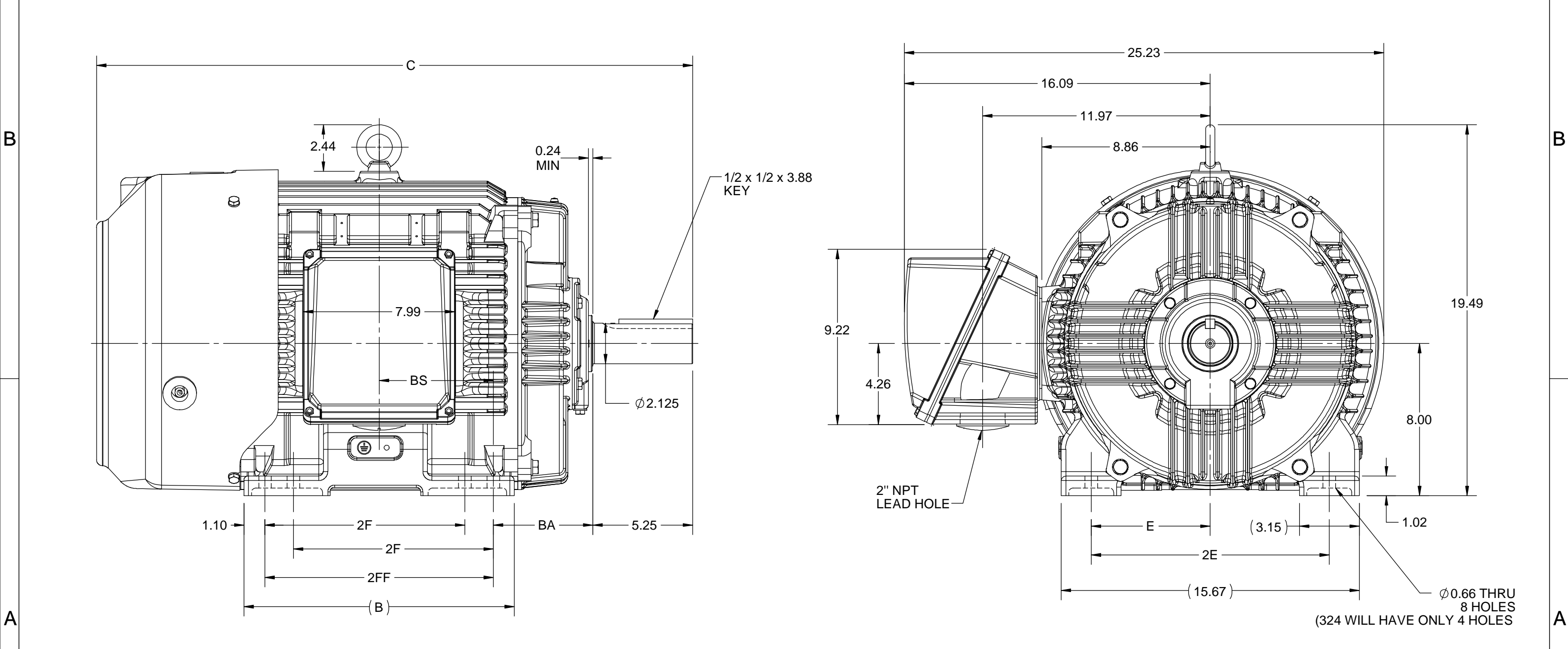
| | | | |
|------------------------|----------------|----------------------------|-----------------------------|
| Output HP | 50 Hp | Output KW | 37.0 kW |
| Frequency | 60 Hz | Voltage | 575 V |
| Current | 47.0 A | Speed | 1782 rpm |
| Service Factor | 1.15 | Phase | 3 |
| Efficiency | 94.5 % | Power Factor | 85 |
| Duty | Continuous | Insulation Class | H |
| Design Code | B | KVA Code | G |
| Frame | 326T | Enclosure | Totally Enclosed Fan Cooled |
| Thermal Protection | No Protection | Ambient Temperature | 40 °C |
| Drive End Bearing Size | 6312 | Opp Drive End Bearing Size | 6212 |
| UL | Listed | CSA | Y |
| CE | Y | IP Code | 56 |
| Hazardous Location | DIVISION 2 T2B | Number of Speeds | 1 |


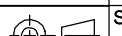
Technical Specifications

| | | | |
|-----------------------|------------------------------|--------------------|----------------------------|
| Electrical Type | Squirrel Cage Inverter Rated | Starting Method | Line Or Inverter |
| Poles | 4 | Rotation | Reversible |
| Resistance Main | .127 Ohms | Mounting | Rigid Base |
| Motor Orientation | Horizontal | Drive End Bearing | Ball |
| Opp Drive End Bearing | Ball | Frame Material | Cast Iron |
| Shaft Type | T | Shaft Diameter | 2.125 in |
| Assembly/Box Mounting | F1/F2 CAPABLE | Inverter Load | CONSTANT 2:1/VARIABLE 10:1 |
| Outline Drawing | SS312939-200 | Connection Drawing | EE7300 |

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| 4 | | | | 3 | | | | 2 | | | 1 |
|----------|-------|-------|------|-------|-------|-------|------|------|----------|----------|---|
| DASH NO. | B | C | E | 2E | 2F | 2FF | BA | BS | MOUNTING | FRAME | |
| 100 | 12.71 | 29.85 | 6.25 | 12.50 | --- | 10.50 | 5.25 | 5.25 | F1 OR F2 | 324T | |
| 200 | 14.21 | 31.35 | | | 10.50 | 12.00 | | 6.00 | | 324/326T | |



| | | | | | | | |
|---|------------------------|-------------------------------|--|--|--|----------------------------|-----------------|
| DRAWING REVISION D | REVISION BY ASHOK N | REV DATE/© DATE 14/10/2020 | PRIMARY DIMENSIONS ARE INCH mm DIMENSIONS IN [BRACKETS] ARE FOR REFERENCE ONLY | DRAWN BY BISWA |  Regal Beloit America, Inc. | | |
| ECO ECO-0194008 | APPROVED BY GNK | DATE 14/10/2020 | | DATE 24/12/2018 | DESCRIPTION OUTLINE 324/326T FR-NEMA-SD & IEEE841 | | |
| ECO DESCRIPTION | | | | APPROVED BY SBD | | | |
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| | | | | REFERENCE | | | |
| | | | | THIRD ANGLE PROJECTION  | SIZE B | DRAWING NUMBER SS312939 | SHEET 1 OF 1 |
| | | | | | | | |

THREE PHASE - SINGLE VOLTAGE
MOTOR - CONDUIT BOX @ 'A'

TO REVERSE ROTATION:
INTERCHANGE ANY TWO LINE
LEAD CONNECTIONS

TERMINAL BLOCK WHEN SPECIFIED

IF MOTOR HAS 9 LEADS

T1(U1)

T1(U1)

T1(U1)

L1

T2(V1)

T2(V1)

T2(V1)

L2

T3(W1)

T3(W1)

T3(W1)

L3

IF MOTOR HAS 6 LEADS

T1(U1)

T1(U1)

L1

T2(V1)

T2(V1)

L2

T3(W1)

T3(W1)

L3

A-9806 DECAL



VIEW OF TERMINAL END

| OPTIONAL CORD CONNECTION | |
|--------------------------|-------|
| L1 | WHITE |
| L2 | RED |
| L3 | BLACK |

| | | |
|--|-------------------|-------------------------------|
| DRAWING REVISION AC | REVISION BY BS | REV DATE/© DATE 26/07/2022 |
| REQUEST NUMBER CR-0010402 | APPROVED BY SN | DATE 26/07/2022 |
| REQUEST NUMBER DESCRIPTION DRAWING UPDATED | | |
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PRIMARY DIMENSIONS ARE INCH
mm DIMENSIONS IN [BRACKETS]
ARE FOR REFERENCE ONLY

| |
|---------------------------|
| DRAWN BY DA |
| DATE 03-26-1993 |
| APPROVED BY TB |
| DATE 03-26-1993 |
| REFERENCE |
| THIRD ANGLE PROJECTION |

| | |
|---|--------------------------|
| Regal Beloit America, Inc. | |
| DESCRIPTION CONNECTION DIAGRAM EXTERNAL - SINGLE VOLTAGE - 3Ø MOTOR | |
| MATERIAL | PROCESS/FINISH |
| SIZE A | DRAWING NUMBER EE7300 |
| SHEET 1 OF 1 | |



DATA VOLTS: 575

CERTIFICATION DATA SHEET

CONN. DIAGRAM: EE7300
 REFERENCE MODEL #: 326THFCD19033
 OUTLINE: SS312939
 CAT #: W581A
 WINDING: HA32004006 NONE 3
 MOUNTING: F1/F2 CAPABLE

TYPICAL MOTOR PERFORMANCE DATA

| HP | KW | SYNC RPM | FL RPM | FRAME | ENCLOSURE | TYPE | KVA CODE | DESIGN |
|----|----|----------|--------|-------|-----------|------|----------|--------|
| 50 | 37 | 1800 | 1780 | 326T | TEFC | TFC | G | B |

| PH | HZ | VOLTS | AMPS | START TYPE | DUTY | INSL | S.F. | AMB (° C) | ELEV. (Ft) |
|----|----|-------|------|------------------|------|------|------|-----------|------------|
| 3 | 60 | 575 | 47 | LINE OR INVERTER | CONT | H | 1.15 | 40 | 3300 |

| F.L. EFF | 94.5 | 3/4 LD EFF | 94.5 | 1/2 LD EFF | 94.1 | GTD EFF | ELECT. TYPE |
|----------|------|------------|------|------------|------|---------|-------------------|
| F.L. PF | 85.0 | 3/4 LD PF | 82.0 | 1/2 LD PF | 73.8 | 94.1 | SQ CAGE INV RATED |

| F.L. TORQUE | LR AMPS | L.R. TORQUE | B.D. TORQUE | F.L. RISE (° C) |
|-------------|---------|----------------|----------------|-----------------|
| 148 LB-FT | 290 | 275 LB-FT 186% | 395 LB-FT 267% | 70 |

| SOUND PRESSURE | SOUND | ROTOR WK² | MAX. LOAD WK² | SAFE STALL TIME | STARTS/HOUR | APROX. |
|----------------|--------|-------------|---------------|-----------------|-------------|---------|
| 72 dBA | 81 dBA | 12.0 LB-FT² | 325 LB-FT² | 20 SEC. | 2 | 730 LB. |

*** SUPPLEMENTAL INFORMATION ***

| DE BRACKET TYPE | ODE BRACKET TYPE | MOUNT TYPE | MOTOR ORIENTATION | SEVERE DUTY | HAZARDOUS LOCATION | DRIP COVER | SCREENS | PAINT |
|-----------------|------------------|------------|-------------------|---------------------|--------------------|------------|---------|--------------|
| STANDARD | STANDARD | RIGID | HORIZONTAL | PREMIUM SEVERE DUTY | DIVISION 2 T2B | NO | NONE | BLUE (EPOXY) |

| BEARINGS | GREASE | SHAFT TYPE | SPECIAL DE | SPECIAL ODE | SHAFT | MATERIAL | FRAME MATERIAL |
|-----------|------------|------------|------------|-------------|-------------------------|----------|----------------|
| DE ODE | | | | | | | |
| BALL BALL | POLYREX EM | T | NONE | NONE | 1045 HOT ROLLED (C-204) | | CAST IRON |
| 6312 6212 | | | | | | | |

| THERMOSTATS | PROTECTORS | WDG RTD's | BRG RTD's | THERMISTORS | CONTROL | SPACE HEATERS |
|-------------|------------|-----------|-----------|-------------|---------|---------------|
| NONE | NOT | NONE | NONE | NONE | FALSE | NA |

| R1 (ohms/ph) | R2 (ohms/ph) | X1 (ohms/ph) | X2 (ohms/ph) | Xm (ohms/ph) | VIBRATION (in/sec) |
|--------------|--------------|--------------|--------------|--------------|--------------------|
| 0.2 | 0.1203125 | 0.940625 | 1.7171875 | 31.8390625 | 0.080 |

| | | |
|---------------------------------|--|--|
| * N O T E S * | If Inverter equals NONE, contact factory for further information | |
| | INVERTER TORQUE: CONSTANT 2:1/VARIABLE 10:1 | |
| | INV. HP SPEED RANGE: NONE | |
| | ENCODER: NONE | |
| | NONE PPR | |

| | |
|---------------------------------------|--|
| PREPARED BY: _____ DATE: 5/13/2020 | BRAKE: NONE NONE FT-LB: NA VOLTAGE: NONE HZ: |
|---------------------------------------|--|

FORM: 3531 REV_4 2/27/06
 ** Subject to change without notice.

Data Sheet

Date: 5/6/2020
 Customer: _____
 Attention: _____
 Submitted by: _____

marathon
 Motors

326THFCD19033

Submittal

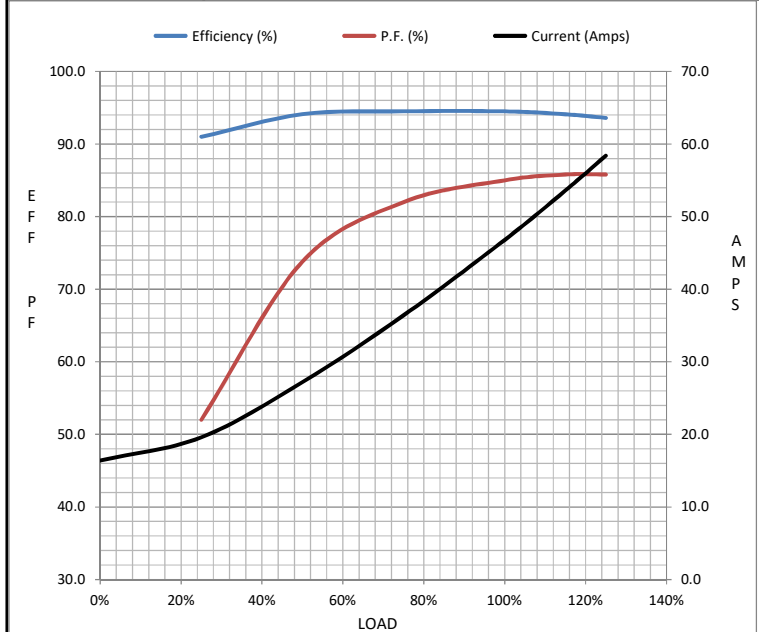
Data @ 575 V

Motor Load Data

| Load | 0% | 25% | 50% | 75% | 100% | 115% | 125% | LR | |
|----------------|------|------|------|------|------|-------|------|------|--|
| Current (Amps) | 16.4 | 19.6 | 27.2 | 36.4 | 46.8 | 53.6 | 58.4 | 290 | |
| Torque (ft-lb) | 0.00 | 36.5 | 73.5 | 110 | 148 | 170 | 185 | 275 | |
| RPM | 1800 | 1790 | 1786 | 1782 | 1780 | 1,775 | 1770 | 0 | |
| Efficiency (%) | | 91.0 | 94.1 | 94.5 | 94.5 | 94.1 | 93.6 | | |
| P.F. (%) | 4.5 | 52.0 | 73.8 | 82.0 | 85.0 | 85.8 | 85.8 | 38.0 | |

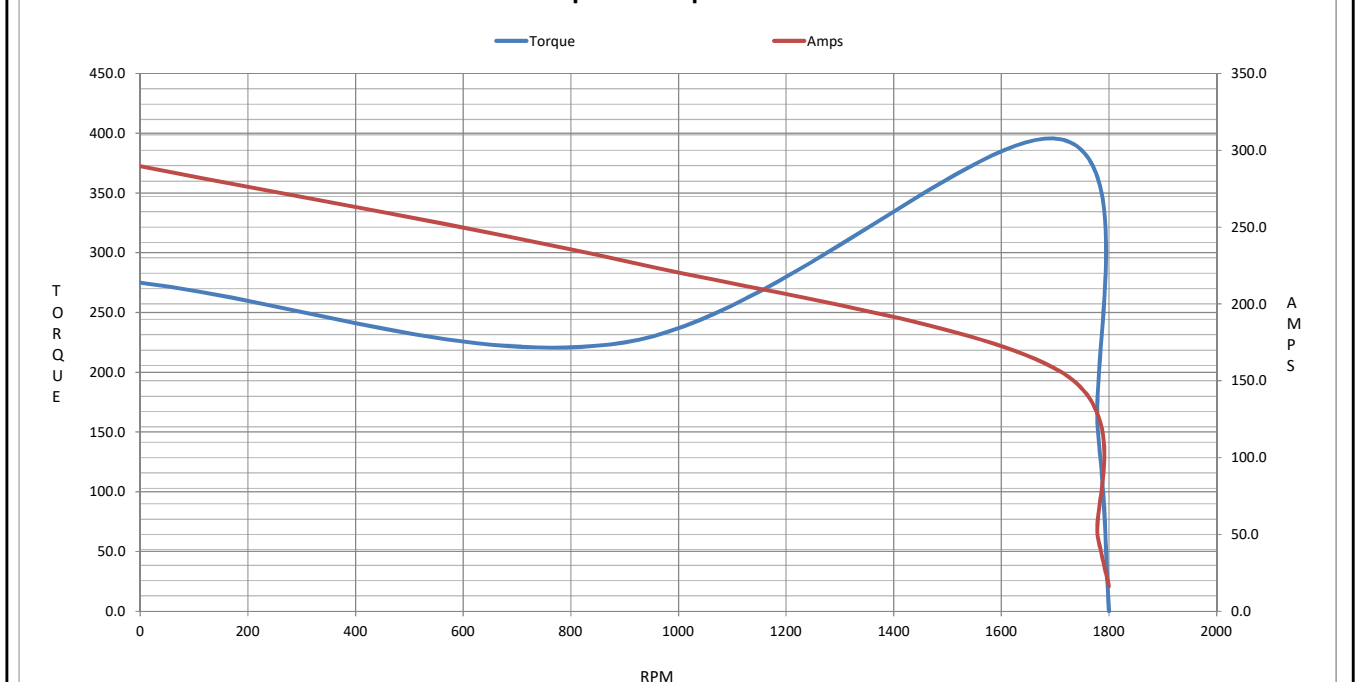
Motor Speed Data

| | LR | Pull-Up | BD | Rated | Idle |
|----------------|-----|---------|------|-------|------|
| Speed (RPM) | 0 | 900 | 1710 | 1780 | 1800 |
| Current (Amps) | 290 | 228 | 156 | 46.8 | 16.4 |
| Torque (ft-lb) | 275 | 225 | 395 | 148 | 0.00 |



| Information Block | | | | |
|----------------------------|--------|----------------------------|--------|---------|
| HP | | 50.0 | | |
| Sync. RPM | | 1800 | | |
| Frame | | 326 | | |
| Enclosure | | TEFC | | |
| Construction | | TFC | | |
| Voltage | | 575 | V | |
| Frequency | | 60 | Hz | |
| Design | | B | | |
| LR Code letter | | G | | |
| Service Factor | | 1.15 | | |
| Temp Rise @ FL | | 70 | ° C | |
| Duty | | CONT | | |
| Ambient | | 40 | ° C | |
| Elevation | | 3,300 | feet | |
| Rotor/Shaft wk² | | 12.0 | Lb-Ft² | |
| Ref Wdg | | HA32004006 NONE | | |
| Sound Pressure @ 1M | | 72 | dBA | |
| VFD Rating | | CONSTANT 2:1/VARIABLE 10:1 | | |
| Outline Dwg | | SS312939 | | |
| Conn. Diag | | EE7300 | | |
| Additional Specifications: | | | | |
| 0 | | | | |
| 0 | | | | |
| EQUIV CKT (OHMS / PHASE) | | | | |
| R1 | R2 | X1 | X2 | Xm |
| 0.1280 | 0.0770 | 0.6020 | 1.0990 | 20.3770 |

Speed -Torque Curve



EC Declaration of Conformity

The undersigned representing
the manufacturer:

Regal Beloit America
100 East Randolph St.
Wausau, WI 54401

and the authorized representative
established within the Community:

Marathon Electric UK
6F Thistleton Road Ind. Estate
Market Overton
Oakham, Rutland LE15 7PP UK

are committed to providing customers with products that comply with applicable regulations and international protocols to which they are subject, including the requirements of the European Parliament Directive on the Harmonization of the laws relating to electrical equipment designed for use within certain voltage limits (2014/35/EU).

Regal Beloit America declares that the following product(s), to which this declaration relates, are in conformity with the relevant sections of the EC standards listed below.

This statement supersedes any statements previously issued pertaining to the product(s) listed below and is subject to change without notice.

Model No : 326THFCD19033

(Model No. may contain prefix and/or suffix characters)

Catalog No : W581A

Rework No : N/A

Directives :

Low Voltage Directive 2014/35/EU

Harmonized Standards Used :

EN 60034-1: 2010 (IEC 60034-1: 2010)

EN 60034-5: 2001/A1:2007 (IEC 60034-5: 2000/A1:2006)

Authorized Representative:



Michael A. Logsdon
Vice President, Technology

Authorized Representative in the Community:



Julian Clark
Marketing Engineer

Created on 09/01/2022

CE 22